



United States Food Administration

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# FOOD QUESTIONS ANSWERED

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### IMPORTANT NOTICE!

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Readers of this book are reminded that conditions and situations referred to may change at any moment—may, indeed, have changed while the book was in the press.

“Conservation of food must be adjusted to meet necessities from time to time, for neither production nor Allied demands are constant factors, nor can any of these factors be anticipated for long periods in advance in the disturbed conditions in which we at present live.”

U. S. FOOD ADMINISTRATION.

# FOOD QUESTIONS ANSWERED.

## ADMINISTRATION.

1. *What is the United States Food Administration?*

A Government organization created as a war measure to meet all food problems, national and international.

2. *How was it created?*

Congress gave the President power to create it by Executive order.

3. *When was it created?*

August 10, 1917.

4. *What work was begun before this date?*

On May 17, 1917, the President requested Mr. Herbert Hoover to take over the proposed task of food administration, and on June 12, 1917, he urged Mr. Hoover to begin assembling the voluntary forces of the country to save food.

5. *What is the purpose of the Food Administration?*

(a) To secure sufficient food for our civilian population, for our soldiers and sailors, for the soldiers and civilians of our associates in the war.

(b) To maintain an even supply of essential foods.

(c) To stabilize prices by abolishing speculation, hoarding, and profiteering.

6. *What does the Food Administration ask of the American people?*

To save wheat; to save meat; to save sugar; to save fats; to save transportation; to eliminate waste; to substitute other foods for those we are asked to save; to eat only as much as we need.

7. *How can these things be accomplished?*

By increased production, proper distribution, control of exports and checking of speculation; but chiefly by the voluntary effort of every man, woman, and child in the United States.

8. *Is the entire work of the Food Administration done from the central office in Washington?*

No; the work is decentralized. Every State has its own Federal Food Administrator recommended by Mr. Hoover and appointed by the President.

9. *What is the meaning of the term "decentralized"?*

Removing some of the functions of an organization from the central authority to local authorities.

10. *Why can not all administrative work be done in Washington?*

Because State laws and local conditions vary so greatly that those who know local conditions can administer to better advantage; but the central authority and the decision of all policies remain there.

11. *How is the work in each State decentralized?*

Through the appointment by its Federal Food Administrator of a county chairman or administrator for each county.

12. *What assistants has the Federal Food Administrator in his work?*

State and county administrators are aided by home economic directors; by merchant representatives, who look after the stores; by hotel chairmen, who supervise hotels and restaurants; by library directors, who render service through the public libraries; by educational directors; by enforcement aids; by various staff members for commodities of local importance.

13. *Do the Federal Food Administrators of the various States keep in touch with the United States Food Administration in Washington?*

Yes.

14. *How?*

By frequent conference and constant interchange of information relating to national policies and local conditions.

15. *What salaries are received by the United States Food Administrator and the Federal Food Administrators of the different States?*

They receive no salaries; they give their services to the Government.

16. *Why does the Food Administration seem to change its policy in many of its rulings?*

Because, although the purpose remains the same, new factors constantly arise in our present disturbed condition which make necessary a readjustment of method and policy to that purpose.

#### BEEF.

17. *Why is beef one of the meats we are asked to save for the allies?*

Because it is a concentrated food to which the inhabitants of the allied nations are accustomed.

18. *Is there a shortage of beef in Europe?*

Yes; particularly in France.

19. *Why is it difficult to raise cattle there?*

Because of lack of men to tend cattle, shortage and high price of feed, the diversion of land from pasture to cultivated fields.

20. *Why is cattle shortage particularly serious?*

Because when herds are depleted it takes years to build them again.

## BREAD.

21. *Is bread as important to the American as to the Frenchman?*

No; only 9½ per cent of the average American income spent on food goes to bread and flour, and these articles form only 39 per cent of the average American diet.

22. *How important is bread to the Frenchman?*

It is the basis of his nourishment; bread constitutes 52 per cent of the total food consumption during normal times in France.

23. *Is European bread now made of wheat flour entirely?*

No; it is heavily admixed.

24. *Why is bread cheaper in England than in the United States?*

Because the British Government has subsidized the bread.

25. *How much does it cost the British Government?*

\$200,000,000 annually.

26. *Is not this money ultimately obtained by taxation?*

Yes.

27. *Is corn meal used in the Army?*

Yes. Sometimes it is mixed with wheat flour and sometimes used without wheat, to make corn bread. Corn bread is served at different periods as a change from the bread ordinarily supplied.

28. *Are other cereals just as nourishing as wheat?*

Generally speaking, yes.

29. *What is the advantage of ordering bread 24 hours in advance at the stores?*

The baker or grocer can then estimate correctly the amount of bread to have on hand, and thus eliminate waste.

30. *What percentage of the bread baked in the United States is baked at home?*

Sixty per cent is home baked.

31. *Does the Food Administration require commercial bakers to use wheat-flour substitutes in bread and rolls?*

Yes. The regulation of May 3, 1918, required 25 per cent substitute with 75 per cent wheat.

32. *Why has the Food Administration standardized the size of the bakery loaf of bread?*

To reduce the cost of baking and distributing, to give the public a square deal, and to fix competition upon price.

33. *What are the standard weights of bread loaves?*

Three-fourths of a pound, 1 pound, 1½ pounds, 2 pounds, and other pound weights.

34. *Why does the Food Administration advocate the use of the ¾-pound loaf?*

As a wheat conservation measure in the hope that the ¾-pound loaf may be made to do the work the 1-pound loaf did before.

35. *How many 1-pound loaves of bread can be made from a barrel of flour?*

Two hundred and sixty loaves.

36. *Is graham bread a wheat bread?*

Yes; but it also contains 26 per cent bran, shorts, and middlings, which are included in the list of wheat-flour substitutes for bakers.

37. *What is whole-wheat bread?*

Bread which contains varying quantities of bran, shorts, or middlings.

38. *May graham bread and whole-wheat bread be used on wheatless days?*

As a general rule, no. Some public eating places can not well do without these and Victory bread, but in the home, no wheat should be eaten on wheatless days.

39. *What is Victory bread?*

Bread baked with the percentage of admixture required by the Food Administration.

40. *What other cereals can be mixed with wheat to make Victory bread?*

Bakers are allowed to use bran, shorts, and middlings, corn flour, corn meal, edible corn starch, hominy, corn grits, barley-flour, rolled oats, oatmeal, rice, rice flour, buckwheat flour, potato flour, sweet potato flour, milo, kaffir, and feterita flours and meals, soya bean meal, peanut meal, tapioca or cassava flour, taro flour, banana flour, and other products of a similar nature which may be used in baking. See answer to No. 183 for household list.

41. *May bread made entirely of graham flour or whole-wheat flour be called Victory bread?*

Yes, if it contains 25 per cent of bran, shorts, and middlings.

42. *Was rye flour used in making Victory bread?*

Yes, until March 31, when it was withdrawn from the substitute list because a shortage of rye flour for rye-bread baking was threatened.

43. *How else may the name "Victory" be used?*

The name "Victory" may also be given by bakers to sweet yeast-dough goods, crackers, biscuits, cakes, pies, fried cakes, and pastry, provided one-third of their flour or meal content consists of wheat-flour substitutes.

#### CALORIE.

44. *What is a calorie?*

The amount of heat needed to raise the temperature of 1 pound of water 4° Fahrenheit.

45. *How can we think of a calorie?*

As a unit of measurement, just like a foot or a quart or a pound.

46. *What does a calorie measure?*

Heat energy.

47. *What is a unit of energy?*

Another name for calorie.

48. *What food value does the calorie measure?*

Its fuel value to the body.

49. *Is it possible to have the right number of calories in the diet and yet not have the proper diet?*

Yes; the calorie amount may not be properly distributed among the different classes of food necessary for the body.

50. *What are these classes of food?*

See answers to questions 191 and 210.

51. *What are daily calorie needs?*

For a workingman.....	3,500 to 4,000
For an active woman.....	2,800 to 3,000
For a sedentary man.....	2,200 to 2,800
For a sedentary woman.....	1,800 to 2,300
Youth, 14 to 16 years.....	1,500 to 3,200

52. *How many calories does a soldier need daily?*

Four thousand.

#### CANDY.

53. *How much money is spent annually in the United States for candy?*

About \$400,000,000. This is almost double the amount needed to keep Belgium supplied with food for a year.

54. *Ought children to give up candy?*

They may well do so, if they get the sugar they need from other sources.

55. *If we do eat candy, what kind ought we to confine ourselves to?*

Conservation candies, such as chocolate-covered nuts and fruits, candies with corn sirup, honey, maple sirup, or molasses. The object is to save the cane and beet sugar.

56. *Is there plenty of chocolate?*

Yes; there is plenty of unsweetened chocolate; it is a pure and wholesome food.

#### CANNING.

59. *What is the object of canning vegetables at home?*

To use more perishables in place of staples and to save transportation.

58. *May we use sugar for canning fruits?*

Yes, a limited amount. But you are urged to can as much as possible without sugar.

59. *Must our sugar allowance be made to cover canning?*

No. This is for normal household use. A limited additional amount for canning will be available. Ask your local Food Administrator.

60. *Is canning fruits making a wise use of sugar?*

Yes. It prevents waste of fruit, furnishes a concentrated and palatable food for winter.

61. *Can fruits be canned without sugar?*

Yes. And sugar may be added later in the year when it is more plentiful.

#### CHEESE.

62. *Why are we not asked to save cheese?*

Because we have a plentiful supply on hand in addition to that needed for exports.

63. *How much cheese did we import in 1914?*

An average of over 5,000,000 pounds every month, almost entirely fancy varieties.

64. *How much did we import in August, 1917?*

Half a million pounds.

65. *What is the food value of 1 pound of cheese?*

American cheese contains 130.6 grams protein, 162.8 grams fat, 1.35 grams carbohydrates, and furnishes 2,055 calories (according to Atwater and Bryant). It equals 1 pound of fat meat in energy value.

66. *Is cheese made of whole milk or skim milk?*

Most of it is made of whole milk.

67. *Since the butter supply is somewhat limited, why not make cheese of skim milk and use cream for butter production?*

Because cheese is made when there are such quantities of milk on hand that all of it could not be put on the market or consumed as milk or butter. It is really a by-product of the dairy industry.

68. *What per cent of the milk produced is made into butter and what per cent goes into cheese?*

42 per cent to butter, 5 per cent to cheese.

69. *What is cottage cheese made of?*

Skim milk, buttermilk, or sour milk.

70. *Is cottage cheese nourishing food?*

Yes. It is rich in protein, and in price it is one of the cheapest protein foods now available.

71. *What does a pound of cottage cheese represent as protein value in terms of other foods?*

One pound cottage cheese is equivalent to—

1.27 pounds sirloin steak.

1.37 pounds chuck rib beef.

1.53 pounds fowl.

1.46 pounds fresh ham.

1.58 pounds loin pork chop.

72. *What other products are made of sour milk or buttermilk?*

Skim-milk cheese, hard cheese, sour-milk drinks, all of which are wholesome, casein and milk sugar.

73. *What place has cheese in the diet?*

It is a substitute for meat, and should be eaten as a dish instead of a tidbit.

#### CHILDREN.

74. *Should children obey the instructions issued by the Food Administration?*

Yes. These instructions are based on sound principles of health and take the special needs of the child into consideration. The Food Administration constantly emphasizes the fact that children should be properly nourished.

75. *Should children have butter?*

They should.

76. *Should children have milk?*

It is essential that children be given plenty of whole milk.

77. *Should fruit and vegetables be included in the child's diet?*

Children should have either fruit or vegetables, preferably both, every day. A healthy child between 3 and 6 may have almost any vegetable that he will chew thoroughly.

78. *Do children need sweets?*

They need some form of sugar in their diet.

79. *Where else besides in candy can children get sugar?*

In fruits, especially in the dried ones, and in fruit pastes, jams, jellies, honey, corn sirups, and maple sugar; also from cereals and other foods with which sugar is commonly used.

80. *Ought children to give up soda water and other sweet drinks?*

Yes; or their use should be greatly cut down.

81. *How much milk, sugar, fats, and meat should children have daily?*

Child of 10—Milk, 1 pint.

Sugar, 3 ounces.

Fats, 2 ounces.

Meat, 4 ounces.

### CONSERVATION.

82. *What does conservation mean?*

“The preservation of our natural resources for economical use, so as to secure the greatest good to the greatest number.”

83. *How can we conserve food?*

By reducing consumption; by cutting out waste; by using some other foods in place of the foods we are asked to save; by using local products and thus saving transportation.

84. *Is it true that many people eat too much?*

Probably 30 per cent of American people either eat or take into their kitchens much more food than is necessary.

85. *Does the Food Administration object to teas and refreshments at parties?*

Not if conservation rules are observed; but as a general principle of thrift it does not encourage the habit of eating between meals.

86. *How can those people who neither waste nor eat too much help the Food Administration?*

By substituting foods that are plentiful for the wheat, meat, fats, and sugar that are needed for shipping overseas.

87. *How can I find out about these problems?*

By writing to the Federal Food Administrator in your State for the free publications of the United States Food Administration.

88. *What are these publications?*

Brief statements of Food Administration policies and their application to current phases of the conservation movement.

89. *Is food conservation really necessary?*

So necessary that we may lose the war unless we conserve.

90. *Why is food conservation necessary?*

Because men have been withdrawn from farm and field to fight; because great food supplies have been sunk by submarines or destroyed in battle; because there is vastly increased demand for food for soldiers and war workers; because through good and bad seasons reserves must be built up against the lean years.

91. *How has the wheat crop in France been affected?*

It has fallen off more than half.

92. *What is the bread ration in France?*

10½ ounces daily per person, with constant possibility of being lowered.

93. *What is the situation in France in regard to other supplies?*

France is producing 1 gallon of milk where she formerly produced 2½. Oils, fats, eggs, and meat are scarce.

94. *What is the present situation in Italy?*

There is extreme need of cereals, meat, and fats.

95. *How dependent is England on foreign countries for cereals?*

She has to import three-fifths of the cereals needed.

96. *What are the present needs in England?*

Meats, fats, dairy products, sugar, and cereals are urgently needed.

97. *Why is American help vitally necessary?*

Because America is nearest and best able to supply food with the least exposure to submarines.

98. *Is not the seriousness of the food situation exaggerated?*

It is not; food is essential to winning the war. A 1-ounce slice of bread wasted is a bullet thrown away; to waste food is treason to cause and country.

99. *Have the other warring nations been forced to practice food conservation?*

Yes; if Germany had not done so she would have been defeated long ago.

100. *Why is the housekeeper asked to help shoulder the burden of conservation?*

Because so much of the food raised in this country passes through her hands.

101. *How can the little that one person can do help?*

The little that one person can do, multiplied by the millions of helpers, mounts up to vast sums.

102. *What are some figures showing the results from small daily savings?*

One 1-ounce slice of bread saved each day in the 22,000,000 homes of the country would total 9,625,000 pound loaves saved a week—approximately 35,648 barrels of flour saved. One ounce of sugar saved a day would total about 26,736 barrels saved a week.

103. *Will the small individual savings actually get to the Allies and help win the war?*

Unquestionably, yes. Every time you eat a wheat substitute it is exactly as if you stretched out your hand and gave the wheat you have saved to some fighter or worker in trench or field or factory "over there."

104. *Why does the Food Administration ask a person with plenty of money to refrain from buying more food than is absolutely necessary for health?*

Because it is a patriotic duty to eat only what is needed for health so that food may be saved to help win the war.

105. *Why is it insufficient to say "I've always saved all the food I can?"*

Because to-day it is not only saving but substitution which is necessary.

106. *But will not foodstuffs spoil at the grocer's if people do not buy them?*

A grocer orders supplies according to the demand. If you constantly decrease your demand for certain things he will reduce his supplies by that much.

107. *What are the foods which we must especially save?*

WHEAT—MEAT—SUGAR—FATS.

108. *Why must we send these particular foods?*

Because they contain the most concentrated nourishment in the most easily shippable form.

#### CORN.

109. *What American crop is the most valuable, measured by its food value and production per acre?*

Corn. One acre of corn gives nearly 150 pounds of digestible protein and more than 3,000,000 units of energy

110. *Why did we not send much corn to the Allies at first?*

Partly because they lacked the facilities to handle it, and partly because they were unfamiliar with it and unready to take a strange foodstuff.

111. *Are we shipping much corn now?*

As much as possible.

112. *Is it true that corn meal does not keep well?*

It does not keep as well as wheat.

113. *Why do the Allies take corn now?*

Because they have been educated to the use of corn.

114. *In what form is corn shipped?*

In the grain, as flour, and as meal

115. *Why is corn so important?*

Because it is valuable food, with food by-products such as corn oil, sugar, and starch; it is a good substitute for wheat, and a splendid feed for live stock.

116. *Is corn as nutritious as wheat?*

Yes.

117. *What are the various corn foods?*

Corn, corn meal, corn flour, cornstarch, corn sirup, corn oil, hominy, grits, samp.

#### DAIRY PRODUCTS.

118. *What are the dairy products?*

Milk, cream, butter, cheese, etc.

119. *What are the distinctive qualities of milk, butter, and cheese?*

Milk is called a "perfect food" because it contains all the food elements in nearly the right proportion for proper nutrition and in the most digestible form; butter is probably the most attractive fat and is 100 per cent digestible; cheese has high protein value and is a good substitute for meat.

120. *Why is the number of dairy cattle in Europe diminishing?*

Because Europe has had to eat many dairy animals; because shortage of labor has reduced fodder and help necessary for the herds; and shortage of shipping has limited the amount of imported fodder.

121. *Why do the Allies turn to us for dairy products?*

Because supplies reaching them from Scandinavia, Holland, and Switzerland are now largely cut off, and shipping can not be provided to bring food from Australia and New Zealand.

122. *Why should we encourage our dairy industry?*

Because children need plenty of milk and butter; because the world faces a shortage of milk and butter; and because dairying is fundamental in much of our agriculture.

123. *How can we use dairy products most wisely?*

By using butter only on the table; by using more skim and sour milk and more whole milk; by wasting no milk or butter.

124. *May we use ice cream freely?*

Ice cream is a healthful food and offers an excellent way of using milk products. But it contains sugar, which is one of the foods we wish to save. Patronize dealers who use corn sirup and honey in place of sugar, and when making it at home, always use sugar substitutes.

125. *How much butter and cheese did we export to England, France, and Italy before the beginning of the war?*

An average of 724,522 pounds of butter and 1,670,777 pounds of cheese per year.

126. *Have our exports of these commodities increased?*

Yes. We sent to these countries during our first year in the war, April 1, 1917, to April 1, 1918:

Butter, 9,506,506 pounds.

Cheese, 28,721,385 pounds.

127. *What about our exports of condensed milk?*

The average yearly exports to England, France, and Italy before the war was 400,890 pounds. During our first year in the war, April, 1917, to April, 1918, we exported 299,576,626 pounds of condensed milk to these countries.

#### DEALERS.

128. *Does the Food Administration ask the cooperation of dealers and handlers of foodstuffs?*

Yes; everyone from producer and dealer to consumer is asked to cooperate.

129. *What have food merchants done?*

Representatives of all branches of food merchandising in the country have conferred with the administration and pledged their loyal support.

130. *How is the problem of distribution dealt with?*

By conference and by licensing, and by certificates.

131. *What is accomplished by conference?*

The members of a trade agree on fair prices and practices; they agree to make short stocks go as far as possible, and to keep supply steady and prices even.

132. *How have commercial enterprises helped in food conservation?*

1. Grocers have limited sales and urged use of substitutes.

2. Butchers have limited sales and have meatless days when required.

3. Bakers have had profits kept down to prewar basis. They have been cut in fancy breads, pastries, etc., and they are making Victory products. The prices of the ingredients of bread have risen 150 per cent, but price of bread less than 50 per cent.

4. Hotel men have helped to observe wheatless, meatless, and porkless days when required, and have conserved in every way.

5. Confectioners have been cut down to 50 per cent of their normal amount of sugar.

6. Flour millers have done away with all gradings and done away with "fancy" flours. They all mill on the same basis.

133. *What methods of economy have been successfully practiced in these businesses?*

The "cash-and-carry" plan; standardizing prices and profits; eliminating waste; eliminating duplication of service; shortening store hours.

134. *How can the housewife help the merchant in other ways?*

By patronizing stores which display the merchants' pledge; by reporting unreasonable charges to her county or State Federal Food Administrator, who will take action under the law.

135. *What is the merchants' pledge?*

"We pledge ourselves to give our customers the benefit of fair and moderate prices, selling at no more than a reasonable profit above cost to us."

#### EGGS.

136. *What has been the effect of using eggs widely in place of meat?*

It has put great pressure on stocks of storage and fresh eggs.

137. *How has this pressure been met?*

By cold-storage regulation, and by prohibiting for a time the sale or slaughter of hens.

138. *How else has this pressure been met?*

Bakers, confectioners, and stewards have used dried and frozen eggs.

139. *What kind of eggs are dried and frozen?*

Fresh eggs with shells damaged in transit.

140. *How are these eggs handled?*

They are broken into clean containers, all bad eggs discarded, and the contents of the good eggs are quickly frozen or dried for food purposes.

141. *Are these eggs as good as shell eggs?*

Yes; they are high-quality, wholesome food, handled under absolutely sanitary conditions.

142. *What is the temperature at which eggs should be cold stored?*

Frozen eggs, about 10° Fahrenheit; shell eggs, from 29° to 31° Fahrenheit.

#### EMBARGO.

143. *What is an embargo?*

An authoritative stopping of any special trade.

144. *What is the value of an embargo?*

It keeps a check on all supplies coming in or going out of the country.

145. *What object can we obtain by it?*

We can keep neutral countries from delivering to Germany food ostensibly wanted by the neutral country itself.

146. *What significant example is there of this?*

Fats. Fats sufficient to supply the fat requirement of 7,700,000 soldiers entered Germany in 1916. A large percentage of those fats came from this country. The embargo stops such leaks as that.

#### EXEMPTION.

147. *What classes of civilians are exempted from following conservation rules?*

Invalids and old people.

148. *Are not children exempt?*

Not unless they are ill or on a diet. But it should be remembered that growing children need more of certain foods, such as whole milk, than adults. Don't stint the children.

#### FATS.

149. *Do Americans eat too much fat?*

As a Nation we have the reputation of being the greatest fat eaters and wasters in the world.

150. *Why is it necessary to save fats?*

Because fats have high value as energy-producing food of a sort specially needed by soldiers; and because they are needed in the manufacture of high explosives, for the lubrication of machinery, and for ointments.

151. *Why are fats so important to Germany?*

They are the essential food that Germany most lacks. Eating-fat in Germany not under Government control costs from \$3 a pound up.

152. *What are the animal fats?*

Cream, butter, lard, and fats of all animals.

153. *What are the vegetable fats?*

Olive oil, cottonseed oil, corn oil, and oil from nuts.

154. *Is there any difference in the value of animal and vegetable fats in cooking?*

No; vegetable fats are just as good as animal fats.

155. *Is there any essential difference between fats and oils?*

No; fats are solid at room temperature and oils are liquid.

156. *How can we save fats, especially animal fats?*

By frying less; by saving meat drippings; by using butter only on the table; by using substitutes for lard; by wasting no soap.

157. *How much fat should an adult consume daily?*

Not below 40 grams (about  $1\frac{1}{2}$  ounces) and many will prefer 50 grams (about  $1\frac{3}{4}$  ounces) or 60 grams (a little over 2 ounces).

### FISH.

158. *Is fish a "brain food"?*

No more so than other flesh foods. Fish is rich in phosphorus, and for this reason when food values were first discussed was credited as "brain" food. Phosphorus, however, is no more a brain builder than other substances.

159. *When is the best time to substitute fish for meat?*

During the spring, summer, and fall months when the seasonal varieties of fish are most available and are produced in the largest quantities.

160. *Is fish cheaper in warm weather?*

Yes. Owing to the difficulties the fisheries have to contend with in connection with storms and ice during the winter months the catches of the fishermen are much less than during the spring, summer, and fall.

161. *Which are more plentiful, salt-water fish or fresh-water fish?*

Salt-water fish, although the fisheries of our Great Lakes and rivers are very productive.

162. *Are supplies of fish running out?*

No; the Government has developed new fisheries and has recommended varieties not commonly known which are wholesome and nutritious.

163. *Why must we pay fancy prices for fish?*

It is not necessary; there should be in every market at least one kind of fish retailing at 10 cents a pound or less.

164. *Why should we have frozen fish?*

In order to take care of the surplus catches of certain seasonal varieties of fish and make quantities of such varieties available in our food supplies during the winter months of the year when the total catch of the fisheries is below normal.

165. *Is frozen fish wholesome?*

Most of the pack of frozen fish is frozen in storage plants at the water in the heavy-producing centers. The fish are frozen almost immediately after coming out of the water and are in a thoroughly wholesome condition. Frozen fish should be eaten freely and the people should not fear to make full use of supplies wherever available.

166. *Should the fish be thawed out at the retailers?*

Wherever possible fish should be taken home from the retailer in a frozen condition without being thawed out by the retailer.

167. *What should the housekeeper do?*

She should endeavor to secure frozen fish from the retailer and keep the fish frozen until she wishes to use it.

168. *How is the best way to thaw it out?*

By placing it on ice in a cool place.

169. *How long does this process take?*

Several hours.

170. *Is there a quicker way to thaw it out?*

Yes; by putting the fish in cold water—never use hot water.

171. *Should the water it is thawed out in be used?*

By all means use the water if the fish is boiled; or use it for chowder. Some of the value of the fish goes into the water and is thus lost unless the water is made use of.

172. *What are the advantages of cold-storage fish?*

1. It makes it possible to obtain these varieties of fish in the large cities during the season of scant or no production.

2. Its effect is to standardize and to lower the annual level of prices.

3. Frozen fish can be shipped in refrigerator cars to most any point and, not being affected by ordinary delay, makes transportation and the caring for fish possible and safe.

4. It provides fish out of season.

173. *Do these same points hold good for cold-storage foods in general?*

Yes.

#### FLOUR.

174. *How many bushels of wheat makes a barrel of flour?*

4½ bushels.

175. *How many pounds of flour in a barrel?*

196 pounds.

176. *Explain the "pound for pound" or "50-50" rule.*

The rule that one must buy 1 pound of nonwheat cereals listed as substitutes for every pound of wheat flour bought.

177. *What was the reason for the so-called "50-50" order?*

To save wheat by encouraging people to eat more of other cereals.

178. *Why was this "50-50" order necessary?*

Because of the ignorant who don't know, and the indifferent who don't care.

179. *What is whole-wheat flour?*

A flour containing 25 per cent or more of bran, shorts, or middlings.

180. *What is graham flour?*

Graham flour is the whole grain of the wheat, including the germ, without extracting, without the addition or substitution of any part of the grain.

181. *Why are these flours considered wheat saving?*

Because they contain a higher percentage of the wheat grain than ordinary flour; they yield a greater amount of flour from a given amount of wheat.

182. *May they be used on wheatless days?*

Yes; in foods served in public eating places. In the home make it an absolutely wheatless day by eating more potatoes, corn, rice, etc., and cutting out all use of wheat.

183. *What are wheat-flour substitutes for the household?*

Hominy, corn grits, corn meal, corn flour, edible cornstarch, barley flour, rolled oats, oatmeal, rice, rice flour, buckwheat flour, potato flour, sweet-potato flour, soya-bean flour, milo, kaffir and feterita flours, and meals.

184. *Can flours be used in bread making without admixture of wheat?*

Other flours can be used alone in many cases in making quick breads or steamed breads.

185. *Why should I not buy as much flour as I wish?*

Because in this war we can not consider our own selfish interests. One person refusing to cooperate can upset the plans of a community; an upset community can disrupt a State; a disrupted State can rob a Nation of victory. We stand or fall together.

#### FOOD.

186. *Why will food win the war?*

Because fighters can not fight without sufficient food, and the civilians of America, Britain, France, and Italy who support soldiers and sailors can not do so without sufficient food, and we are going to see that this food is available.

187. *What must be done to make food win the war?*

Food must be abundantly produced, economically manufactured, evenly distributed, and carefully conserved.

188. *What has been one of the chief causes of the Russian trouble and of riots in other countries?*

Lack of food.

189. *What purposes does food serve?*

It forms blood, tissue, bone; it repairs waste, furnishes energy for all kinds of work; it keeps us warm; it regulates the body processes.

190. *Where does food come from?*

Plants and animals, and to a slight extent from minerals.

191. *What are the three great classes of food substances?*

Protein, carbohydrates, fat.

192. *Are there other important food substances?*

Yes; mineral substances and vitamins.

193. *What is protein food?*

Foods whose special work is to build the body and repair waste.

194. *How much protein is needed daily for the average man doing moderate work?*

2½ ounces.

195. *What foods are rich in protein?*

Milk, eggs, meat, fish, cheese, grains, dried legumes, such as peas and beans. These foods do not all contain proteins of equal value.

196. *What are the fats?*

Fats are the foods whose special purpose is to give heat and power to work. They also serve to improve flavor of foods.

197. *Where are fats found?*

Fats are found principally in meat, poultry, and nuts, and they are particularly familiar in the form of butter, cream, and oils.

198. *What are carbohydrates?*

They are sugars and starches.

199. *What is their function?*

Like fats, their chief function is to give heat and power to work.

200. *Where are sugars found?*

In cane and beets, sirups, honey, and fruits, especially dried fruits.

201. *Where are starches found?*

In cereals, grain like corn and rice, potatoes, dried beans and peas, chestnuts, peanuts.

202. *Why do cereals require long cooking?*

Long cooking softens the outer layer of the grain and makes the interior contents more readily available.

203. *What mineral substances are found in food?*

Lime salts, iron salts, and various mineral compounds which serve for body building and regulating.

204. *Where especially are they needed?*

In children's diet.

205. *What foods contain mineral substances?*

Milk, fruit, and vegetables are important sources.

206. *What is cellulose?*

The cellular and fibrous tissue such as is found in fruits and vegetables is called cellulose.

207. *What is its function?*

It gives bulk to the diet and tends to prevent constipation.

208. *What are vitamins?*

Newly discovered substances found in milk, eggs, meat, fruits, vegetables, and whole grains.

209. *What is the function of vitamins?*

To help regulate the vital processes and especially to promote the growth of children.

210. *How are foods classified?*

For convenience, food can be subdivided into five groups, as follows:

1. Fruits and vegetables.
2. Meats, meat substitutes, and meat savers.
3. Grains and other starchy foods.
4. Sugars and sweets.
5. Fats.

211. *What is a simple explanation of each group?*

1. Fruits and vegetables contain mineral matter which helps build bones and tissues, and they are especially good for regulating the body processes.

2. Milk, meats, fish, eggs, cheese, furnish proteins that are especially good as tissue builders and repairers of waste tissue.

3. Potatoes, corn, rice, and other cereal grains contain starch and are good as body fuel.

4. Cane and beet-sugar, honey, maple sugar, sirups, sugars in fruits, are good as body fuel and as flavoring.

5. Cream, butter, meat fats, lard, vegetable and nut oils furnish fat. Fats have a high value as body fuel and give pleasant flavor to food.

212. *What is a well-balanced diet?*

One containing a proper proportion of the five food groups.

One food from each of these groups should be used each day.

213. *Does this principle apply to everyone?*

The diet will vary with the age, weight, health, occupation, and location of the individual. The variation is largely in the quantity rather than in the kind used.

214. *If in doubt concerning food matters where can information be obtained?*

From the Federal Food Administrators of the States.

#### GARBAGE.

215. *Is there anything of value in garbage?*

Yes; it contains grease, fertilizers, and foodstuff for hogs, chickens, and cattle.

216. *Can any of these values be recovered?*

Yes; garbage recovery in 29 of our larger cities comes to about 72,000,000 pounds of grease and 150,000 tons of agricultural fertilizer per year, valued above \$11,000,000. Many cities use part or all their garbage for feeding hogs, chickens, and cattle. There is still a great waste in many cities which means a loss of millions of dollars annually.

217. *How are the grease and fertilizers used?*

Grease is raw material for nitroglycerine, soaps, waterproofing compounds, paints, etc. Present recoveries give enough glycerine for 16,000,000 75-mm. shells and acids for about 200,000,000 12-ounce cakes of soap. The fertilizer tankage yields nitrogen and other plant food enough to restore the soil exhaustion of 8,000,000 bushels of wheat.

218. *How is this grease and fertilizer obtained from garbage?*

By extraction in modern garbage reduction plants.

219. *Is reduction more economical than feeding?*

The returns per ton are about equal. Reduction is practicable only in larger cities; feeding is feasible in the smallest communities.

220. *How much pork is produced annually on garbage feed?*

About 300 cities of over 10,000 population and totaling more than 9,000,000 people are feeding their garbage to hogs. The amount of pork actually marketed exceeds 30,000,000 pounds.

221. *Can the difference between garbage-fed hogs and grain-fed hogs be detected in quality of pork?*

Experts can not tell the difference.

#### HOARDING.

222. *What is hoarding?*

Storing away more than the food supplies needed for a reasonable length of time.

223. *Why do people hoard?*

Because they fear that a shortage is coming and wish to protect themselves, even though it be at the expense of others.

224. *What are some of the evil effects of hoarding?*

It raises prices; it imposes a heavier burden on those already doing their utmost; it throws out of joint the distribution system; it results in waste where there are no proper facilities for storing.

225. *What is the moral wrong of hoarding?*

It is selfish, cowardly, unpatriotic.

226. *Why is hoarding unnecessary?*

Because the Government is protecting the food supply.

227. *Is there any law against hoarding?*

Yes; the food-control act.

228. *Is there any punishment for hoarders?*

Yes. The food-control act provides fines of not more than \$5,000 and imprisonment for hoarding of food by dealers, manufacturers, or householders.

229. *How is the dealer punished for hoarding?*

His license may be revoked and he may be prosecuted, with the penalties provided in the act.

230. *How is the unlicensed dealer punished?*

His wholesaler is required to cut off his supplies.

#### HOTELS AND PUBLIC EATING PLACES.

231. *What are public eating places?*

Hotels, restaurants, dining cars, and other places where cooked food is sold in public, to be eaten on the premises. For the purpose of regulation, clubs and passenger steamships are included in this class.

232. *How do they participate in the Food Administration?*

Hotels and dining cars were among the first to set up a conservation campaign; they are represented in the Food Administration by volunteer directors at Washington, by hotel chairmen for the chief districts, and by State chairmen attached to the Food Administration staff.

233. *How do they cooperate?*

By observing all requests of the Food Administration in their catering, by bringing home to the traveling public the Food Administration program, by carrying on menu cards the Food Administration messages and slogans, by saving in the kitchen. Dining-car service has been instrumental in opening right of way on many roads to war gardens for employees.

234. *What have they accomplished?*

During the wheat shortage public eating places, as shown by careful estimates, saved 25,000,000 pounds of wheat monthly; during the meat shortage in the winter their saving was 22,000,000 pounds monthly; on dining cars alone the saving was 425,000 pounds of meat and 350,000 pounds of wheat. Hotels were among the first to take the "total-abstinence pledge" in the wheat-saving campaign and gave telling impetus to that movement.

235. *Are hotel prices under Government control?*

The food-control act gives the Food Administration no authority to deal with prices in hotels and restaurants.

## LICENSING.

236. *What is the object of licensing?*

To prevent hoarding, speculation, profiteering, manipulation by middle men and all other injurious practices.

237. *What kind of people have licenses?*

All persons engaged in the importation, manufacture, storage, or distribution of certain fundamental foodstuffs specified in the various Presidential proclamations, except retailers where gross annual sales do not exceed \$100,000.

238. *What foodstuffs are under license in the United States?*

Grains, vegetables, lard and lard substitutes, milk and butter, cheese, beef, pork, mutton, poultry, fish, eggs, sugar, fresh and dried fruits; canned corn, tomatoes, and peas; dried peas and beans; cabbages, potatoes, onions; canned salmon and sardines; wheat, rye, corn, barley, and rice flour; feeds, malt, green coffee, cotton seed and its products.

239. *Have any licenses been taken away from merchants?*

Yes.

240. *For what reason were these licenses taken away?*

Hoarding; speculating and profiteering; refusing consignments of foodstuffs and thereby letting them spoil; charging exorbitant prices; forcing other than official combination sales.

241. *How did the Food Administration get authority to introduce the license system?*

Through a provision of the food-control act, passed August 10, 1917.

242. *How are licenses issued?*

Through the License Division of the United States Food Administration at Washington.

243. *How does the Food Administration keep track of the licensees?*

By means of reports sent to the Food Administration at specified periods, or as called for, and investigation in the field.

244. *What is accomplished by licensing?*

By this system some 20 prime commodities are controlled, speculation is killed, profit taking limited, superfluous middle men ruled out.

245. *Is there a law against practices injurious to the public interest?*

Yes, there are heavy penalties for manufacturers, wholesalers, large retailers, and others handling food in bulk, who violate the law or regulations.

246. *What classes do not come under direct control?*

The consumer, the small retailer, the farmer, and certain farmers' associations.

247. *How does the Food Administration learn about stocks of food on hand, and how much is needed?*

From trade reports and investigations carried on by other branches of the Government, and by its own inquiries.

#### MEAT.

248. *How can we save meat?*

By following the instructions of the Food Administration as to the amount and kinds of meats to be consumed.

249. *Was anything accomplished by "meatless days," "meatless meals," and "porkless days"?*

Yes. Our meat supplies so increased that there was enough to meet the Allies' needs and still justify a normal consumption at home.

250. *Is this enlarged meat supply due to conservation of meat as directed by the United States Food Administration?*

In large part; voluntary abstinence enabled the Government in the summer of 1918 to export as much meat as transportation permitted; at the same time production of pork and poultry largely increased.

251. *Why do Food Administration requests change in regard to these "meatless" days and meals?*

Because conditions of production, Allies' demands, and shipping facilities change, and our supplies of meat must be regulated accordingly.

252. *How much meat did we export before the war to the Allies?*

3,000,000 pounds of beef monthly, 45,000,000 pounds of pork products.

253. *How much meat were we able to ship as a result of conservation?*

The highest quantity, up to July, 1918, was 395,255,000 pounds.

254. *What is the attitude of the Food Administration toward "putting down" pork in the home?*

It encourages this practice as it will relieve the burden on transportation, save cost of packing, and provide supplies to carry the home over the months of decreased supplies.

255. *Why are lamb and mutton allowed without restriction?*

Because beef and pork are the meats we especially need to save for the Allies.

256. *May we eat brains, sweetbreads, liver, tongue, and heart?*

Yes; the supply of these is ample.

257. *Should we eat those meats in preference to steaks and roasts of beef?*

Yes.

258. *Why does the Food Administration emphasize the necessity of raising more cattle and hogs?*

Because land devoted to the support of dairy cows and hogs produces more human food than with any other kind of live stock.

#### MILK.

259. *Does the Food Administration ask us to decrease our consumption of milk?*

No; nor attempt to substitute other foods for it. Use all the milk. Children need plenty of whole milk. Use sour and skim milk in cooking and for making cottage cheese.

260. *If I can not afford whole milk, shall I get skim milk?*

Yes; skim milk is an excellent food. Try to make up for the lack of fat in some other way. But remember that children should have whole milk.

261. *Is milk a cheap food compared to its food value?*

Yes. Even at 12 cents a quart one gets protein as cheaply as in meat at 25 cents a pound, eggs at 35 cents a dozen, or fresh cod at 20 cents a pound.

262. *How can we avoid wasting any milk?*

By using all remnants of sour milk, cream, and buttermilk in cooking and for homemade cottage cheese.

263. *How much milk does a child need each day?*

At least a quart up to the age of 6 years; after that at least a pint up to the age of 12.

264. *Does an adult need milk?*

Under normal conditions it is not absolutely necessary as it is for children, but it is nevertheless a desirable food for adults.

265. *What is the nourishment in skim milk?*

It contains all the protein of whole milk, contains lime, phosphorus, milk sugar.

266. *What is the food value of milk?*

Milk contains protein, fat, and carbohydrates, and minerals; by reason of the presence of vitamins it stimulates the growth of tissue in adults and is of the greatest importance for children's diet; it should be regarded as a food rather than a beverage.

267. *Why is milk so important a food?*

Because it is the most complete and well balanced of any single food and is a vital food need for babies and children.

268. *How much milk does the United States produce annually?*

About 33,000,000,000 quarts annually.

269. *How is this milk usually distributed?*

4.3 per cent goes to feed calves.

6.6 per cent goes into the production of ice cream and condensed milk.

89.1 per cent is used in butter and cheese making and for fluid use.

#### PLEDGE.

270. *What is the Food Administration pledge?*

I am glad to join in the service of food conservation in our United States and I hereby accept membership in the United States Food Administration, pledging myself to carry out the directions and advice of the Food Administrator in the conduct of my household in so far as my circumstances permit.

271. *What were the results of the pledge campaign in the fall of 1917?*

Over 11,000,000 pledge cards were signed by the end of November, 1917, and the State Food Administrators have continued the work begun by Food Administration headquarters.

272. *What should I do if I wish to serve the cause of food conservation?*

Get a pledge card from your State Food Administrator, sign it, return it to him, then live up to your pledge.

273. *What obligations does this involve?*

Simply and solely that you try your best to conserve food according to the advice of the Food Administration.

274. *Are there any dues to pay if I join the administration?*

There are no dues; there is no tax; the pledge card is not for Government use in any way. It is purely a record of the army of democracy fighting with knife and fork against a brutal autocracy.

#### PORK.

275. *What are pork products?*

Pork, ham, bacon, lard, sausage.

276. *Do not pork products come under the head of fats as well as meats?*

Yes, bacon and ham both have much fat, and lard is a well-known fat.

277. *Why is the hog so important?*

Hogs turn grain and roots into meat and fat quickly and economically, and the increase of droves is much faster than the increase of cattle.

278. *Has the production of hogs responded to demand?*

During 1917 we produced about 2,000,000,000 pounds less than in 1916; the situation improved through the winter and in recent months receipts have been piling up faster than shipments disposed of them.

## POTATOES.

279. *What is the food value of potatoes?*

They contain starch, lime, phosphorus, iron and potassium, salts needed in the diet, and they are an alkaline corrective in the general diet, neutralizing acids from meats and other acid foods.

280. *Why are we urged to eat potatoes?*

Because the potato is one of the best substitutes for wheat.

281. *Why are potatoes better boiled in their skins?*

Because in that way they have 50 per cent more nitrogenous matter and 40 per cent more mineral matter.

282. *How can the use of potatoes save wheat?*

Potatoes eaten abundantly make it possible to get along with less bread. They may be substituted for about one-fourth of the wheat flour in making ordinary bread and rolls.

283. *Are sweet potatoes easily canned or dried?*

Yes.

284. *Do we export potatoes?*

Not to any extent.

285. *Why not?*

They are too bulky unless dried.

## PRICES.

286. *Did food prices rise when we entered the war?*

Yes; between April 6 and the 17th of May, 1917, when Mr. Hoover was asked to undertake the work of Food Administrator, wholesale prices rose 17 per cent on staple foods.

287. *Did they continue to rise?*

On the average the apex was reached by the 17th of May, 1917, and since then there has been a slight decline.

288. *Can the Food Administration fix prices?*

No; that power or its delegation lies with Congress.

289. *Is the primary object of food control to lower prices?*

No; it is to secure sufficient food for us and the Allies. Increased production is absolutely essential for this purpose and this can not be obtained with lowered prices. The Food Administration endeavors to make the price yield only a fair profit to the producer, so that he makes no fictitious profits out of the consumer. To this end speculation and resales within the trade and superfluous middlemen's profits are forbidden.

290. *Why is the lowering of prices not the first object?*

Low prices will not win the war; production must be stimulated, for increased production is essential to win the war. Prices must be high enough to secure sufficient production.

291. *How did the idea come about that the chief object was to lower prices?*

The first efforts at control of food in Europe were based upon fixing retail prices; further, during the discussion of the food bill in Congress the price of wheat took up so great a part of the time that this idea gained currency.

292. *Were any prices fixed by law?*

None fixed; minimum prices for producers were established by law for wheat only. Congress in the food act provided a minimum price of \$2 a bushel for producers for the 1918 crop. The President established a fair price on the basis of \$2.20 a bushel for the 1917 crop, which was continued for the 1918 crop by proclamation of February, 1918.

293. *How have the prices of beef and pork products been handled?*

The United States Food Administration has no authority to fix prices; it influences prices through buying for the Army and the Allies. The first consideration has been to maintain prices that will encourage production; next, to hold down margins to gain the lowest possible price for the consumer.

294. *How have retail prices risen since the beginning of the war (to December, 1917)?*

In Germany prices are 230 per cent higher (latest available date is October, 1916).

In England prices are 117 per cent higher.

In Canada prices are 65 per cent higher.

In United States prices are 53 per cent higher.

295. *What has always been the war-time trend of prices?*

Heretofore prices have increased radically even without the danger of actual world shortage which we face to-day. This has been due to speculative influences.

296. *What makes prices so high?*

The war conditions of increased demand, increased cost of raw materials and labor, and scarcity of labor.

297. *What are other causes for prices rising unreasonably?*

Trade manipulation, local scarcity due to transportation troubles, and sometimes the greed of the dealer.

298. *What can the consumer do when extortionate prices are charged?*

Report to the local food administrator.

299. *How can consumers know whether they are being charged excessive rates by the retailer?*

By consulting the Fair Price List printed in the newspapers.

300. *Will the Food Administration not deal with the question of prices?*

Yes, to the best of its ability; but it must be remembered that war brings about abnormal conditions which must be accepted bravely.

301. *How have retail prices been affected by the license system?*

They have been kept from being as high as they would otherwise be.

302. *Is there any example of this?*

Sugar. The retail price has stayed between 9 and 12 cents a pound, whereas with no control it would probably have reached nearly 50 cents a pound, judging from our past experience, when there was neither a national nor international sugar shortage.

303. *Is a "reasonable" price a low price?*

Not necessarily. Under abnormal conditions a reasonable price may be actually high.

#### PROFITEERING.

304. *What is profiteering?*

Making unreasonable profits by unfair trade practices.

305. *Has profiteering been abolished?*

In many food lines it has been eliminated, even in the face of actual shortage.

306. *What has the United States Food Administration done to curb profiteering?*

It has issued licenses to retail dealers in foods doing a business of \$100,000 or more a year, and all wholesalers dealing in licensed commodities; it has issued lists of fair food prices as a guide to the consumer; it has revoked licenses and imposed fines upon profiteers; it has issued "maximum margins" of profits in certain staple articles; it has instituted systems of inspection.

307. *How does this check profiteering?*

If the dealer does not follow instructions he loses his license and must stop his business.

308. *Does this mean that wholesalers are under direct Government control?*

Yes.

309. *Is the small dealer under Government control?*

No. He is under indirect control.

310. *In what way?*

If he charges profiteering prices he gets no more supplies from the wholesaler who is under direct control.

311. *What has been the effect of this indirect control?*

It has kept prices from soaring. (See example given above under Prices.)

312. *What rules help particularly to eliminate profiteering?*

The rule which forbids the resale of food commodities within the same trade, without reasonable justification; the rule prohibiting more than normal profits, and the rule against hoarding.

#### RETAILERS.

313. *What control has been exercised over the small retailer?*

He can not get supplies from the wholesalers who are directly controlled if he does not conform to rules.

314. *Has this control been successful?*

Yes.

315. *What has been the attitude of retail grocers?*

Over 60 per cent of the retail grocers of the country have voluntarily signed the pledge card to obey instructions, and more pledges are being received daily.

316. *Why should the buyer order consistently?*

Because demand creates supply. Retailers do not stock up very far ahead and they will not put money into food nobody asks for.

317. *How can the buyer cooperate successfully in this?*

By ordering evenly. Don't fast one week and feast the next. Be careful and steady.

318. *Why is it wrong to complain to the grocer or grocer's clerk about the Food Administration regulations?*

Because neither the grocer nor his clerk is responsible for the regulations. Furthermore, it is unpatriotic and makes the necessary cooperation between grocer and Food Administration more difficult.

#### SUBSTITUTES.

319. *What is a substitute food?*

A food similar in food value to the one we want to save.

320. *What foods may supply the place of wheat?*

Corn, oats, rice, white and sweet potatoes, barley and other cereals.

321. *What are substitutes for meat?*

Poultry, fish, sea food, milk, cheese, eggs, nuts, legumes, and cereals.

322. *Can any of these be used in place of all the meat?*

Yes; with the exception of legumes and cereals.

323. *What are part substitutes for meat?*

All the legumes—peas, beans (soy, navy, lima, kidney, pinto), lentils, peanuts.

324. *What are substitutes for sugar?*

Honey, maple sirup, corn sirup, sorghum, and molasses.

325. *Can honey be substituted in recipes demanding sugar?*

Yes. When recipes also contain flour allow for the additional water in honey by omitting one-fourth of the liquid called for in the recipe.

326. *What are substitutes for butter and lard?*

Olive oil, corn oil, cottonseed oil, saved meat drippings.

327. *Is there a substitute for milk?*

No.

328. *When substitutes are more expensive than the food we are asked to save, what can those in moderate circumstances do?*

They can bend all their efforts to see that there is no waste of food.

#### SUGAR.

329. *How can we save sugar?*

By using substitutes, avoiding all waste, cutting down the use of sugar as far as possible, avoiding foods which require an excessive amount of sugar, especially "ornamental" sugar (such as frosting), and giving up candy and soft drinks.

330. *Does it save sugar to use brown sugar instead of granulated?*

If there is any saving it is too slight to be of value.

331. *How much sugar may we eat?*

In June, 1918, the amount for the householder was fixed at 3 pounds a month per person. This amount is subject to change with changing conditions.

332. *Does this amount include candy and soft drinks?*

Yes. We should reduce our consumption of candy and soft drinks as much as possible.

333. *Does this amount include the sugar used in canning fruits and vegetables?*

No.

334. *What could we accomplish by cutting out the use of candy alone?*

We could thereby release enough sugar to meet the French shortage, or to more than meet the shortage of Italy.

335. *What was one factor that probably helped bring about the sugar shortage last year?*

Canning and preserving. In August, 1917, there was an increase of 48 per cent and in September, 1917, an increase of 44 per cent of sugar consumption over the corresponding months of 1916.

336. *Was this good conservation?*

Yes; it was justified in the long run.

337. *Will there be another sugar famine?*

If the American people will use no more than the amount stipulated by the Food Administration and refrain from hoarding, there is little likelihood of another serious shortage.

338. *How is sugar used commercially?*

In breadstuffs, condensed milk, flavoring extracts, chewing gum, certain medicines, confectionery, canned fruits and vegetables, cocoa, chocolate, sirups, and beverages.

339. *When did the beet-sugar industry begin in the United States?*

About 1886.

340. *What has its increase been since then?*

From 896 tons to 820,657 tons, or over 90,000 per cent increase.

341. *Does the United States get most of its sugar from this country?*

No. Most of it is imported, and refined here.

342. *Why should we not compare our total consumption of sugar with the sugar rations of the allies?*

Because total consumption means household use and commercial use, while the rations are amounts allotted to individuals, and do not even include the allowance for canning and preserving.

343. *What was the total per capita consumption in the United States for 1917?*

84.35 pounds.

344. *How much of this was for household use?*

61.15 pounds per person.

345. *What was the total per capita consumption in England and in France in 1916?*

66.82 pounds in England.

37.83 pounds in France.

346. *To what amount was the individual ration in the warring countries reduced?*

In July, 1918, the rations were as follows:

England, 26 pounds a year.

France, 13.2 pounds a year.

Italy, 13.2 pounds a year.

Germany, 21 pounds a year.

These rations are not guaranteed. They represent the maximum portion possible if the Government can get the sugar.

347. *Why can we not depend more largely upon shipments of sugar from Java and the Philippines?*

Because the journey is so long that it is an extravagant use of ships.

348. *Are there restrictions on manufacturers and dealers?*

Retailers are allowed to buy only on certificates; manufacturers can get only a percentage of their former requirements, usually 50 per cent; less essential uses are rigidly controlled.

#### VEGETABLES.

349. *Do Americans as a whole eat many vegetables?*

They comprise too small a part of the American diet.

350. *How can we use vegetables to conserve the staples?*

Increase the amount of vegetables eaten in July, August, and September and then save a portion of cereals, meat, sugar, for winter use.

351. *Are vegetables as nourishing as other foods?*

They do not contain as much protein and fat, but they are rich in starch and mineral salts. Sailors and explorers without fresh vegetables suffer from scurvy, which these mineral salts prevent in a balanced diet.

352. *What other part do vegetables play in the diet?*

They are excellent for "roughage." Human beings can not live entirely on rich concentrated foods.

353. *Why should vegetables be used in the diet?*

Because they not only lend variety to the diet but are health agents. They give bulk, mineral salts, and vitamins.

354. *What are legumes, and why are they so called?*

They are beans, peas, lentils, and peanuts. They are called "legumes" because the protein they contain is known as "legumen."

355. *What is the nutritive value of legumes?*

They contain more protein than other vegetables, and may be used in place of meat.

356. *What vegetables may be used to save wheat?*

Potatoes, sweet potatoes, and partially ripe bananas (cooked).

357. *What are the chief starchy vegetables?*

Irish and sweet potatoes, and the legumes.

358. *Which vegetables contain mineral matter?*

All of them. Spinach, carrots, cabbage, lettuce, and many others contain iron.

359. *What use can be made of the water in which vegetables have been boiled?*

It can be used for soups or gravies or sauces. It contains valuable mineral salts necessary for health.

360. *In drying vegetables is their food value affected?*

No. Nothing has been removed but the moisture.

361. *In what way do vegetables prove good substitutes for other foods?*

They contain many of the body-building and regulating elements that we have been accustomed to get from other foods.

362. *What is the special value of using vegetables in country districts and small towns?*

It will relieve the transportation situation.

363. *How can we use vegetables to help the Allies?*

Eat as many perishables in place of staples as possible; eat them as near the source as possible; and conserve staples for winter use and for export to the Allies.

364. *How can small savings in the country help?*

If the rural population, including smaller towns (up to 2,500), would reduce daily consumption during July, August, and September by 1 ounce of sugar, 4 ounces bread,  $1\frac{1}{2}$  ounces meat, and substitute vegetables therefor, it would represent a saving of 21,000,000 bushels of wheat, 157,000 tons sugar, 1,250,000 beeves.

#### WAR GARDENS.

365. *What is a war garden?*

It is a garden in a back yard or vacant lot or other hitherto waste land for the purpose of increasing food production.

366. *What is the aim of the war garden?*

To take the strain off transportation by making each community self-supporting.

367. *Why is it so important at this time?*

Because railroads are greatly hampered by car shortage and freight congestion. Demands for home carrying must be reduced to the lowest point.

368. *What is wise to raise in war gardens?*

According to soil and climate and local needs as many staples as possible, such as potatoes, beans, beets, carrots, turnips, etc., which store easily.

369. *Why should root vegetables be stored for the winter?*

To relieve transportation; to furnish foods in place of wheat and meat; to equalize prices and distribution.

370. *Should any perishables be raised?*

By all means, but only enough for daily use. Do not plant an overstock that will have to be canned in a hurry in order to conserve it.

371. *Does this mean that we ought not to can, preserve, and dry?*

No; it is to warn against the mistakes of last year when too many perishables were planted to be well taken care of. Plant wisely with an eye to future needs.

372. *Ought seeds to be saved for next year?*

Yes; your State college of agriculture will furnish information on what seeds to save and how to save them?

#### WASTE.

373. *How can we eliminate waste?*

By being careful in the buying, preparing, cooking, serving, utilizing of food.

374. *Is waste of food prevalent?*

Yes; it has been a standard criticism on Americans that we waste what other nations would live on.

375. *How do small individual instances of waste amount to large sums?*

One slice of bread wasted every day in every home in the United States equals over 7,600,000 bushels of wheat a year or 456,250,000 pound loaves of bread;  $\frac{1}{2}$  cupful milk so wasted equals 912,500,000 quarts a year; one small butter ball wasted equals over 114,000,000 pounds a year.

376. *How much meat would be wasted in  $\frac{1}{10}$  of a pound thrown away every day by every person in the United States?*

456,000,000 pounds; equal to the edible portions of 538,000 beeves, 291,000 calves, 625,000 sheep and lambs, and 2,132,000 hogs.

377. *Is it true that there is great waste in Army camps?*

Army camps are endeavoring to eliminate every bit of food waste. A food conservation officer has been appointed for each camp.

378. *What have the Army camps already accomplished in food saving?*

They are saving more flour than civilians. The soldier in our Army is eating 19 pounds less flour a year than the Food Administration asks the civilian consumer to use. It is estimated that \$7,500 is saved daily by the "clean plate" in camp.

#### WHEAT.

379. *Why must wheat be saved?*

Wheat is a prime military necessity, for its high keeping quality and easy transport, its universal acceptance and peculiar fitness for bread making; stocks were short last fall and reserves low.

380. *How shall we save wheat?*

By keeping to an allowance of  $1\frac{1}{2}$  pounds a week during shortage, or less or none if one can; by observing wheatless meals and days when so directed; by using quick breads, rice, hominy, oatmeal, and the like in place of wheat; potatoes and vegetables in place of bread.

381. *Has the stringency in the wheat market caused higher retail prices?*

On the contrary, though the price to the farmer has been higher throughout the year, the price of flour has ranged \$6 a barrel less than the preceding year.

382. *Which are the greatest wheat producing countries?*

United States, Russia in Europe, India, Canada, Argentina, Australia.

383. *Why is wheat from Argentina and Australia not available for the Allies?*

Lack of ships, trade route too long, too great danger from submarines.

384. *How did the supply of wheat available for export for the crop year 1917-18 compare with the supply for the previous year?*

In the year 1916-17 our total supply—i. e., the crop and what was carried over from the previous year—amounted to 815,492,000 bushels, of which, at normal consumption, allowing for increased acreage to be sown, we would use 647,524,000 bushels, leaving an exportable surplus of 167,968,000 bushels. During the past year our wheat supply was only 671,234,000 bushels—crop 620,156,000 bushels and carry-over 51,078,000 bushels—which would allow a normal exportable surplus, with a further allowance for increased sowings, of only 13,710,000 bushels, or less than one-tenth of the amount available in the previous year.

385. *How did our actual exports to our Allies compare with the total available for export for these two years?*

In the 11 months ending May 31, 1917, we exported to our Allies 118,071,287 bushels of wheat and flour, or 70 per cent of the exportable surplus, while in 11 months ending May 31, 1918, we sent them 102,169,613 bushels, or almost eight times as much as would ordinarily be available for all our exports in 12 months.

386. *How were we able to send so much more in proportion to our supply than the previous year?*

By decreasing our consumption of wheat products. The result has been an addition of almost 90,000,000 bushels of wheat to the Allies' meager supplies above what would ordinarily be available. This is equal to the entire wheat crop of the United Kingdom.

387. *Is there any bread in Europe now made entirely of wheat flour?*

Only the bread that soldiers get. No civilian gets white bread.

388. *What does "wheat extraction" mean?*

That proportion of the whole grain or berry that goes into the finished flour.

389. *What is the percentage of wheat extraction in different countries?*

In the United States, 74 per cent.

England, 81 per cent.

France, 81 per cent.

Italy, 81 per cent.

390. *Why is a higher extraction than 81 per cent unwise?*

Because a higher extraction contains more of the wheat berry usually devoted to cattle feed, and while this is good for cattle, it is not so digestible for human beings.

391. *Would a continued use of flour of higher extraction than 81 per cent cause malnutrition?*

It was found in Belgium that where the children were so dependent on bread for the bulk of their diet they suffered from malnutrition from eating bread made of too highly extracted flour.

392. *Do they now mill different grades of flour as was done before the war?*

No; all flour is now of one grade.

393. *Does a higher extraction of wheat mean conservation?*

Yes; it utilizes much more of the berry as flour than was done before the war.

394. *If we are milling now 74 per cent of the wheat berry, what becomes of the other 26 per cent?*

It is used for different grades of live-stock feed.

395. *Why do we not mill a higher percentage than 74?*

Because flour milled above that spoils more easily and is not durable enough for stores that may be kept six months before consumption.

396. *What was our former wheat extraction?*

72 per cent.

397. *How does wheat stand in food value per acre?*

It stands next to corn.

398. *What is a close second to wheat in food value?*

Rice, especially unpolished rice.

399. *Can pastries be made without wheat?*

In several hotels they have been made of rice, corn, potato, and other flours with such success that patrons have been unable to tell the difference.

400. *Should we use substitute flour for wheat when wheat flour is as cheap or cheaper?*

Yes; because wheat is needed abroad. The supply is limited, so we must cut down if we are to help our comrades.

401. *Why do people ask such questions as 400?*

Because they have not realized the issues at stake in this war. Now is not the time for the individual to seek cheap food, or to complain because he is asked to forego the food he prefers for something just as nourishing but not so pleasing to him; it is a time to bend every effort to winning the war. See that the soldiers and sailors and the munitions workers get the food they need. They are doing the dirty, cruel, incessant work of fighting for you.

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